



HEDGEROW PLANTING - ESTABLISHMENT GUIDELINES FOR WILDLIFE

Large fields with little or no cover are the rule on the modern agricultural landscape. Whether on cropland or pasture and haylands, lack of hedgerows limits the value of fields to wildlife. Hedgerows provide multiple benefits. In open land they increase “edge effect”, which is important to many species of wildlife. Hedgerows serve as a source of food and cover for wildlife, depending upon the variety of vegetation planted. They also provide corridors or screened travel lanes through which wildlife can move safely from one area to another. Therefore, linking fragmented habitats with hedgerows may greatly increase use of an area by wildlife.

Hedgerows established for wildlife purposes should be a minimum of 25 feet wide, including 2 or more rows of woody plants. Generally, the wider the corridor, the greater the number of species will use it. Hedgerows should be as long as needed for field conditions. The contour should be followed on sloping fields.

Considerations for Wildlife:

- All hedgerows attract wildlife, but plant species selected can greatly affect the benefits provided. Plant species used should benefit wildlife as either food or cover. The best results will be achieved when there is a mixture of trees, shrubs, grasses, vines, and/or forbs.
- Plant a variety of fruit- and nut-producing trees and shrubs.
- A combination of low and tall growing shrubs and/or trees is more effective for cover than a single species. Center row(s) should consist of the tallest growing species and height should decrease down to the outermost rows of herbaceous vegetation. Grasses, vines and forbs should be planted in a strip at least 10 ft. wide adjacent to the woody plants, this will minimize competition with woody species.
- Targeted wildlife needs should be considered when selecting plant species.
- Plant at least 25% evergreens to provide year-round cover. Plant at least 1-row evergreens for visual screens.
- Native species should be planted whenever possible. However any adapted plant, except noxious or invasive species may be used.
- The use of native, warm-season grasses should be encouraged in all hedgerows. These bunch grasses provide good nesting sites for ground-nesting birds, and the open spaces between plants allow good feeding habitat for birds and small mammals.
- Light disking about 10 to 20 feet wide alongside the hedgerow planting will provide additional wildlife food and cover. Light disking should be performed on a 2-3 year cycle. Rotate and/or alternate the location of lightly disked areas each year. Continue this rotation, disking an area every 2nd-3rd year. When the disked area is rotated, the old area should have sufficient permanent cover to provide wildlife habitat and soil loss protection. On highly erodible land, disking should maintain a minimum of 30 percent residue.
- Plots of annuals such as Kobe lespedeza, browntop millet, small grains, or corn can be planted in the spring alongside the hedgerow if the landowner wants to provide additional wildlife plantings. These plantings should be a minimum of 20 feet in width.
- Hedgerows can be used as transition zones, areas that reduce the abrupt change between different types of wildlife habitat such as a soybean field and a forested area. A transition zone should be a minimum of 30 feet in width. In most situations, transition zones can be established in desirable shrubs and grasses by not mowing or disking for 1 to 2 years. In some situations where the available food supply is very low, it may be desirable to plant suitable shrubs, grasses, vines, and forbs on all or part of this 30-foot area.
- The value of older established hedgerows can be improved for wildlife by interplanting open areas within hedgerows or renovating one-third of the length of the hedgerow at a time, using species that provide wildlife food and cover.

Guidelines for Establishment:

1. Planting dates: Plant trees and shrubs between December 1 and March 31. Plant grasses March to May.
2. Care of seedlings: During planting, roots of seedlings must be kept moist and cool at all times. At the end of each day, loose plants should either be repacked in wet moss or healed-in.
3. Site preparation: To reduce plant competition, break and harrow a strip as long and wide as the planned hedgerow. This operation should be performed several weeks prior to planting. Strip herbicide application can be used in the same manner.
4. Soil amendments: Fertilizer and lime are usually not needed at planting.
5. Planting methods: Distance between rows and number of rows will vary, depending on species of plants, width of hedgerow and density desired. If planted in two or more rows, stagger plant spacing in adjacent rows. Plant with hand tools or use a suitable mechanical tree planter. Areas with compacted soil or plow pans should be subsoiled or planted in a manner that would penetrate the pan or compacted soil layer. Seedlings should be planted to just above the root collar (2-3 inches to allow for soil settling). Soil around seedlings should be firmly packed upon completion of planting.
6. Maintenance: Control competing vegetation until woody plants are established. Replant as necessary to maintain a continuous hedge. Provide protection from wildfire and damage from grazing by wild or domestic animals. Damaging pests should be monitored and controlled. Shrub lespedeza will need to be burned or mowed and burned every 3 to 5 years in late winter to keep it a desirable size to benefit wildlife. Fertilizer and lime should be applied according to soil tests to help maintain plant vigor and production. When renovation of the hedgerow is needed, use fire, herbicides, or mechanical means to set back vegetation to an earlier stage of succession. To preserve wildlife habitat, renovate only one-third of the length of the hedgerow at a time, allowing re-growth before proceeding to the next section.
7. Species to plant: See list of recommended woody plants for hedgerows below. Other plants may be used if they meet objectives and are adapted for the site. A NRCS wildlife biologist should be consulted. Avoid use of species known to be a pest such as privet or autumn olive. Tree species should be included for hedgerows between or within crop fields and/or pastures. Hedgerows for transition zones separating fields from forests do not need trees, but should be established with shrubs next to the forest and herbaceous species next to the field. Herbaceous plants next to fields will help reduce competition with crops in fields.

Plant Species	Primary Application	Spacing	Approximate No. of Plants per Acre
Hawthorn	Wildlife food	6' x 6'	1,200
Viburnum	Wildlife food and cover	3' x 4'	3,600
Chickasaw plum	Wildlife food and cover	3' x 4'	3,600
Persimmon	Wildlife food	6' x 6'	1,200
Crabapple	Wildlife food	6' x 6'	1,200
Dogwood (flowering, swamp, or roughleaf)	Wildlife food	6' x 6'	1,200
Shrub lespedeza (japonica, bicolor, thunbergii)	Wildlife food and cover	2' x 3'	7,000
Chinese chestnut	Wildlife food	10' x 10'	450
Golden chinquapin	Wildlife food	10' x 10'	450
Gobbler sawtooth oak	Wildlife food	20' x 20'	100
Eastern red cedar	Screening and cover	6' x 6'	1,200
Loblolly pine	Screening and cover	6' x 6'	1,200

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